

Amendments to the Claims:

The following listing of claims will replace any/all prior versions, and listings, of claims in the application.

1. (Currently Amended) A process for producing a temperature sensitive natural filler-reinforced thermoplastic nylon polymer composition as an article which comprises:

(a) extrusion melt-forming through a die in a first extruder a first mixture to form first strands, the first mixture consisting essentially of a high melting temperature thermoplastic nylon polymer with a first melting temperature of 200°C or above and which has been pre-dried to remove moisture and a metal chloride, bromide or iodide salt, wherein (i) the salt is present in an amount between about 2.5 and 5 percent by weight of the polymer and (ii) the salt reduces the melting temperature of the first mixture to a second lower melting temperature of less than 200°C;

(b) pelletizing the first strands to form pellets; and

(c) extruding a second mixture of a temperature sensitive natural filler and the pellets in a second extruder, at the second lower melting temperature of less than 200°C without degrading the temperature sensitive natural filler to form second strands of the natural filler-reinforced thermoplastic nylon polymer composition, wherein the temperature sensitive natural filler consists essentially of cut fibers selected from the group consisting of a plant leaf, seed, stalk and combinations thereof and, without the metal salt, the extrusion with the temperature sensitive natural filler degrades the temperature sensitive natural filler.

2. (Previously Presented) The process of Claim 1 wherein the fibers are selected from the group consisting of hemp, flax, kenaf, jute, sisal, pineapple leaf fiber, coir, henequen, corn, cotton, and mixtures thereof.

3. – 4. (Cancelled)

5. (Currently Amended) The process of Claim 1 or 2 wherein:

(i) the metal chloride, bromide or iodide salt is added to the melted thermoplastic nylon polymer in the first extruder as a water solution comprising the metal chloride, bromide or iodide salt; and

(ii) the metal in the metal chloride, bromide or iodide salt forms a reaction product with the thermoplastic nylon polymer in the melt.

6. (Canceled)

7. (Previously Presented) The process of Claim 1 wherein in addition the filler reinforced thermoplastic polymer composition is molded into a shape.

8. (Cancelled)

9. (Previously Presented) The process of Claim 1 wherein a glass or a high melting temperature polymer fiber is introduced with the natural filler in step (c).

10. (Previously Presented) A process for producing an article from a temperature sensitive natural fibers-reinforced thermoplastic polymer composition which comprises:

(a) extrusion melt-forming through a die in a first extruder a first mixture to form first strands, the first mixture consisting essentially of a high melting temperature thermoplastic polymer with a first melting temperature of 200°C or above, which has been pre-dried to remove moisture, and at least one metal salt selected from the group consisting of lithium chloride, lithium bromide, lithium iodide, copper chloride, zinc chloride, aluminum chloride, gallium chloride, and mixtures thereof, wherein the salt reduces the melting point of the first mixture to a second lower melting temperature of less than 200°C;

(b) pelletizing the first strands to form pellets;

(c) extruding a second mixture of one or more temperature sensitive natural fibers and the pellets in a second extruder, at the second lower melting temperature of less than 200°C without degrading the natural fibers to form second strands of the temperature sensitive natural fibers-reinforced thermoplastic polymer composition, wherein the temperature sensitive natural fibers consist essentially of cut fibers selected from the group consisting of a plant leaf, seed, stalk and combinations thereof; and

(d) melt-forming an article from the composition of step (c), wherein the extruding and melt forming without the metal salt degrades the temperature sensitive natural fibers.

11. (Previously Presented) The process of Claim 10 wherein the fibers are selected from the group consisting of hemp, flax, kenaf, jute, sisal, pineapple leaf fiber, coir, henequen, corn, cotton, and mixtures thereof.

12. (Previously Presented) The process of Claim 10 wherein the fibers-reinforced composition further includes a maleated compatibilizer and one or more toughening agents selected from the group consisting of rubber, modified rubber, maleated rubber, epoxidized rubber, vegetable oil-based plasticizer, and mixtures thereof.

13. (Original) The process of Claim 10, 11, or 12 wherein the thermoplastic polymer is selected from the group consisting of nylon, polyethylene terephthalate (PET), polybutylene terephthalate (PBT), polytrimethylterephthalate (PTT), ethylene carbon monoxide (ECM), propylene oxide (PPO), polystyrene copolymer blends, polyacetals, cellulose butyrate, acrylonitrile-butadiene-styrene (ABS), methyl methacrylates, polychlorotrifluoroethylene polymers, and mixtures thereof.

14. (Currently Amended) The process of Claim 10, 11, or 12 wherein:
(i) the metal salt is added to the melted thermoplastic polymer in the first extruder as a water solution comprising the metal salt; and
(ii) the metal in the metal salt forms a reaction product with the thermoplastic polymer in the melt.

15. (Previously Presented) The process of Claim 10 wherein the fibers-reinforced thermoplastic polymer composition is molded into a shape.

16. (Cancelled)

17. (Previously Presented) The process of Claim 10 wherein a glass or a high melting temperature polymer fiber is introduced with the fibers in step (c).

18. (Previously Presented) A process for producing a temperature sensitive natural filler-reinforced thermoplastic polymer composition as an article which comprises:

(a) extrusion melt-forming through a die in a first extruder a first mixture to form first strands, the first mixture consisting essentially of a thermoplastic polymer

and at least one metal chloride, bromide or iodide salt, wherein (i) the thermoplastic polymer has been pre-dried to remove moisture and has a melting temperature at about 200° C or above, (ii) the salt is present in an amount between about 2.5 and 5 percent by weight of the polymer, and (iii) the salt reduces the melting temperature of the first mixture to less than about 200°C;

(b) pelletizing the first strands to form pellets; and

(c) extruding a second mixture of the temperature sensitive natural filler and the pellets in a second extruder, at less than 200° C without degrading the temperature sensitive natural filler to form second strands of the natural filler-reinforced thermoplastic polymer composition, wherein the temperature sensitive natural filler consists essentially of cut fibers selected from the group consisting of a plant leaf, seed, stalk and combinations thereof and, without the metal salt, the extrusion with the temperature sensitive natural filler degrades the temperature sensitive natural filler.

19. (Original) The process of Claim 18 wherein the thermoplastic polymer is selected from the group consisting of nylon, polyethylene terephthalate (PET), polybutylene terephthalate (PBT), polytrimethylterephthalate (PTT), ethylene carbon monoxide (ECM), propylene oxide (PPO), polystyrene copolymer blends, polyacetals, cellulose butyrate, acrylonitrile-butadiene-styrene (ABS), methyl methacrylates, polychlorotrifluoroethylene polymers, and mixtures thereof.

20. (Previously Presented) The process of Claim 18 wherein the filler is selected from the group consisting of hemp, flax, kenaf, jute, sisal, pineapple leaf fiber, coir, henequen, corn, cotton, and mixtures thereof.

21. (Previously Presented) The process of Claim 18 wherein the metal salt is selected from the group consisting of lithium chloride, lithium bromide, lithium iodide, copper chloride, zinc chloride, aluminum chloride, gallium chloride, and mixtures thereof.

22. (Previously Presented) The process of Claim 18 wherein a glass or a high melting temperature polymer fiber is introduced with the temperature sensitive natural filler in step (c).

23. – 29. (Cancelled)

30. (New) The process of Claim 1 or 2 wherein the salt is selected from the group consisting of lithium chloride, lithium bromide, lithium iodide, copper chloride, zinc chloride, aluminum chloride, gallium chloride, and mixtures thereof.

31. (New) A process for producing a temperature sensitive natural filler-reinforced thermoplastic nylon polymer composition, the process comprising:

(a) melt extruding in a first extruder a thermoplastic nylon polymer with a first melting temperature of 200°C or above and which has been pre-dried to remove moisture;

(b) adding a metal salt solution to the melted thermoplastic nylon polymer in the first extruder, the metal salt solution consisting essentially of water and a metal halide salt, thereby forming a first mixture comprising the melted thermoplastic nylon polymer and the metal halide salt in the first extruder, wherein (i) the first mixture has a second lower melting temperature of less than 200°C and (ii) the metal in the metal halide salt forms a reaction product with the melted thermoplastic nylon polymer;

(c) extrusion melt-forming through a die in the first extruder the first mixture to form first strands;

(d) pelletizing the first strands to form pellets; and

(e) extruding a second mixture of a temperature sensitive natural filler and the pellets in a second extruder at the second lower melting temperature of less than 200°C without degrading the temperature sensitive natural filler to form second strands of the natural filler-reinforced thermoplastic nylon polymer composition, wherein (i) the temperature sensitive natural filler consists essentially of cut fibers selected from the group consisting of a plant leaf, seed, stalk and combinations thereof, and (ii) without the metal salt, the extrusion with the temperature sensitive natural filler degrades the temperature sensitive natural filler.

32. (New) The process of Claim 31 wherein the metal halide salt is selected from the group consisting of lithium chloride, lithium bromide, lithium iodide, copper chloride, zinc chloride, aluminum chloride, gallium chloride, and mixtures thereof.

33. (New) The process of Claim 32 wherein the metal halide salt is present in the first mixture in an amount between about 2.5 and 5 percent by weight of the thermoplastic nylon polymer.

34. (New) The process of Claim 31, 32, or 33 wherein the cut fibers are selected from the group consisting of hemp, flax, kenaf, jute, sisal, pineapple leaf fiber, coir, henequen, corn, cotton, and mixtures thereof.

35. (New) The process of Claim 31, 32, or 33 wherein a glass or a high melting temperature polymer fiber is introduced with the fibers in step (e).